



# OHM Remediation Services Corp.

A Subsidiary of OHM Corporation

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To <u>P. Briegel</u>	From <u>J. Franz</u>	
Co. <u>A. HOCUMB</u>	Co. <u>P. BRIEGEL</u>	
Dept.	Phone #	
Fax # <u>610-595-0554</u>	Fax #	

February 7, 1996

Commanding Officer  
Department of the Navy/Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway, Mail Stop #82  
Lester, Pennsylvania 19113  
Attn.: Mr. Paul Briegel, P.E.

Re: LANTDIV RAC Contract No. N62470-93-D-3032, Delivery Order No. 0049; OHM Project 16546;  
NAWC Trenton - Interim Remedial Action; Responses to Foster Wheeler Letter dated January 31,  
1996

Dear Mr. Briegel:

OHM Remediation Services Corp. (OHM) has reviewed the letter from Foster Wheeler Environmental Corporation (FW) dated January 31, 1996 and provides the following responses. The responses are keyed into the numbering scheme used by FW in their letter.

1. pH probes must be stored in a "wet" condition if not in use. When OHM turned over the treatment plant to NorthDiv, the pH probes were submerged in water within each tank.
2. The piping installed by OHM was inspected by the ROICC officer, installed as specified, and accepted by NorthDiv. We are interested in knowing of the results of FW's investigation as to why this line failed.
3. OHM is unclear as to the problem with the control wires. Upon system turnover, the groundwater recovery pump was still in operating condition. Again, OHM is interested in knowing of the results of FW's investigation as to the specific "failure" involved. The control wires may have been adversely affected by the flooding conditions mention in Item No. 2 of FW's letter.
4. System tanks should not be fouling. However, OHM concurs with FW's approach to mounting the recirculation pumps off of the bottom of the tanks if fouling is an issue. Fouling was not an issue during OHM operation of the treatment facility; however, biological growth may occur if the treatment system has been stagnant with the process units in a "wet" condition.
5. OHM installed an influent sample tap along the east wall of the treatment building at the center column. We are unclear as to why this sample port was not satisfactory to FW for system monitoring.

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6. OHM personnel provided a brief GC training to FW personnel at system turnover. At this time, the FW personnel on site were given the opportunity to try the equipment and ask any questions. OHM also provided all of the manufacturer documentation on the unit as well as information provided in the O&M manual. Personnel present at system turnover seemed to understand operation of the unit. No additional training was requested of OHM.
7. OHM is curious as to where the sump pump controls were remounted. OHM agrees that, under a flooded condition (full sump), the controls could potentially be located under water; however, the primary objective for the location of the sump pump controls was to avoid creating an obstacle at the sump area.
8. When OHM was operating the system, pressure differential switches were located on the sand filter, bag filter, and all four carbon vessels. The carbon vessel differential switches were removed prior to system turnover as OHM had previously received direction from NorthDiv to remove the rented carbon cells. The differential switches were left in the treatment building, as pointed out to NorthDiv and FW representatives at system turnover, but were not re-installed by OHM due to time constraints (time between decision to remove carbon vessels and decision to keep carbon vessels was less than a week).
9. OHM has no comment on the temporary effluent discharge line installation to the facility barrel-well system as we were not requested to perform this work under our scope. However, it should be noted that when OHM performed system turnover, an effluent flowmeter was provided at the discharge side of the treated water tank. If a second effluent flowmeter was provided for the new discharge line, this was not included in OHM's scope.
10. Pressure relief valve discharge to the pH adjustment tank is an acceptable approach as long as the pressure relief valve piping does not have the potential of being filled with water, thereby restricting pressure relief valve discharge.
11. Prior to discarding the various bottles referenced, please note the following: the cans of paint and acid chloride plating bath are from the various equipment manufacturers and were provided by OHM to allow for maintenance-related touch-up of system equipment. These items should not be discarded. The oil on site was purchased for equipment maintenance (either on-site equipment or rented equipment when needed) and should only be discarded if FW feels that they will not have a use for these items during system O&M. Finally, the 40-ml vials were pointed out to NorthDiv and FW at system turnover. At that time, it was suggested by OHM that the extra samples be emptied into the untreated groundwater tank and the vials discarded. Also, since the standards are now past their useful life, they too could be drained into the untreated groundwater tank and the vials discarded. OHM was not requested by NorthDiv or FW to discard these materials at system turnover.

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12. The PLC alone does not allow for "real time" data logging capabilities. The GE Fanuc Series 90™ Protocol (SNP) DDE driver allows Microsoft Windows™ DDE compliant applications to exchange data with GE Fanuc Series 90 programmable logic controllers. This allows linking "real time" data from the treatment plant into applications for display, logging or trending. It also allows setting individual parameters, or downloading, to a programmable controller from a supervisory computer. All of the hardware and software (supervisory computer, software keys, SNP Driver and application software) have been provided with the PLC unit.

All shutdown conditions were checked by OHM and confirmed operational at system turnover. The existing system can be configured to record shutdown conditions and alarm conditions which may be accessed through the supervisory computer. It is not difficult to re-program, change setpoints, or change data logging frequency once the user becomes familiar with the PLC system.

Recall that OHM never had the opportunity to operate the treatment system with water from the groundwater extraction well. As a result, the PLC algorithms controlling the chemical addition had not been tuned. Only the control action had been verified to be correct. Also note that data logging features were not specified for inclusion as a deliverable under OHM's scope of work. OHM did provide for logging key data four times a day and retention of one half-month's worth of historical data at all times. Changes to the data logging list can easily be programmed on the supervisory computer at any time.

Finally, responding to the close of FW's letter, the high/low pH signals from each of the treatment system tanks were operating correctly at system turnover. Problems with these signals may be related to the "dry out" of the pH probes.

Overall, the key items to be noted in reviewing this letter are as follows:

1. OHM performed treatment system construction in accordance with the approved specifications and drawings. The ROICC inspector on site accepted all installed items. All punchlist items were completed by OHM prior to system turnover.
2. As-built drawings, a complete O&M manual, a detailed description of where OHM had left off with treatment system operation, and a one day system training/turnover were completed by OHM.
3. The system and the various components were inspected, and in most cases tested, by NorthDiv, FW and OHM during the one day turnover. All equipment and controls which could be tested were shown to be in good operating condition.

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4. Finally, OHM was of the understanding from NorthDiv and FW that following system turnover, FW was to have Calgon Carbon change out the carbon in the various carbon cells, then recirculate the system, and perform system startup and operation. OHM was not instructed to prepare any of the equipment for "moth-ball" conditions. The apparent extended shutdown of the treatment system and the recent weather events (flooding, blizzard, and Arctic cold) may have taken their toll on equipment which was not prepared for a long-term storage condition.

OHM is more than willing to work with NorthDiv and FW to clarify PLC issues and GC usage as needed to transition more smoothly into an O&M mode. Please contact me directly at 609-588-6477 if you require any further assistance.

Sincerely,

OHM Remediation Services Corp.



John P. Franz, P.E.

LantDiv Program Manager

pc: David Leadenham, OHM  
David Rule, NORTHDIV  
Katherine Lista, OHM  
OHM Project File 16546